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#### **REMARKS**

This response is intended as a full and complete response to the non-final Office Action mailed August 2, 2005. In the Office Action, the Examiner notes that claims 1-31 are pending and rejected and claim 11 is objected to. By this response, claim 11 has been amended; all other claims remain unamended. Arguments refuting the Examiner's position are provided below.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

#### **Objections**

The Examiner has objected to claim 11 because claim 11 does not have a period at the end of the claim. Applicants have amended claim 11 to include a period at the end of the claim. Therefore, Applicants respectfully request that the Examiner's objection be withdrawn.

#### Rejections

## 35 U.S.C. §103

# Claims 1-3, 5, 8-11, 13, 16, 18, 21, 24, 25, 28, 30, 31

The Examiner has rejected claims 1-3, 5, 8-11, 13, 16, 18, 21, 24, 25, 28, 30 and 31 under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent No. 5,926,230 (hereinafter "Niijima") in view of U.S. Patent No. 5,729,279 (hereinafter "Fuller"). Applicants respectfully traverse the rejection.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy,

110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Niijima and Fuller references alone or in combination fail to teach or suggest Applicants' invention as a whole.

In the Office Action, the Examiner asserts that Niijima discloses various features of the subject invention except for Applicants' limitation of associating a plurality of guide slices for each of at least one location in the guide region. As such, the Examiner cites Fuller for teaching this feature, asserting that Fuller is combinable with Niijima to render the subject invention obvious. Applicants respectfully disagree.

As taught in Niijima, the electrical program guide (EPG) includes a plurality of 3x3 reduced sized elements (depicted as element 49 in either of Fig. 16B or Fig. 18 of Niijima). That is, various programs are reduced in size and conformed to a 3x3 matrix. This matrix construction is then repeated for each of a plurality of programming channels such that six total matrices are created and presented as the entire guide region or array. As shown in Fig. 19 of Niijima, this entire array is constructed and then a highlighting box (represented by the unlabeled thick line) can be moved about this virtual frame memory 49 to display program selections on a monitor apparatus 4 (as seen in Fig. 9 and described in Col. 20, Line 61 - Col. 21, Line 6). The virtual frame memory 49 of Niijima is essentially a "static" arrangement in which the information in each guide region (or memory element) does not change.

In other words, if each of the slice locations of Applicants' invention is interpreted as one of the memory cells in the virtual frame memory 49, then it can be appreciated that there is no true correspondence between each of such memory cells and a respective guide region location (or viewing location on the monitor apparatus 4 of Niijima). That is, the matrix created by the Niijima arrangement is too large to correlate each memory cell with a location on the monitor. Thus, the highlighting box is used to account for this shortfall in Niijima's EPG capabilities. As such, Applicants respectfully submit that Niijima fails to teach or suggest at least the limitation of associating a plurality of guide slices for each of at least one location in the guide region, as taught in Applicants' invention of at least claim 1.

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Furthermore, Fuller fails to teach, show, or suggest Applicants' limitation of associating a plurality of guide slices for each of at least one location in the guide region. The first portion of Fuller cited by the Examiner merely teaches the existence of headers in an MPEG bitstream (Fuller, Col. 19, Lines 28-44). The second portion of Fuller cited by the Examiner merely teaches that information is provided to a decoder board 606 concerning the organization of data frames being transmitted, as well as the location of the encoded pixels. (Fuller, Col. 22, Lines 6-32). Since Fuller is only capable of processing information serially (i.e., until the next data is transmitted, decoded, displayed, etc.), such data frames (consisting of a single data transfer per Col. 21, Lines 53-56 and Col. 22, Lines 17-20) represent only a single slice at a slice location. Fuller does not teach or suggest a plurality of slices. As such, since Fuller does not teach a plurality of slices, Fuller simply cannot teach or suggest associating a plurality of guide slices for each of at least one location in the guide region, as taught in Applicants' invention of at least claim 1.

Moreover, the combination of Niijima with Fuller results in an EPG that has MPEG encoded header information that instructs a decoder board where to place a single slice of information in the virtual frame memory 49. The single slice of information then remains static in the memory while a highlighting box moves thereabout for selection purposes.

As such, there are deficiencies in the combined teachings of the cited references in that Niijima and Fuller, alone or in combination, fail to teach or suggest at least the limitations of "defining a plurality of slice locations for a guide region of the user interface, wherein each slice location corresponds to a respective area and location in the guide region" and "associating a plurality of guide slices for each of at least one slice location in the guide region," as taught in Applicants' invention of at least claim 1. As such, Applicants respectfully submit that the combination of Niijima and Fuller does not render independent claims 1 and 16 obvious.

Furthermore, independent claims 18 and 28 recite the features of the subject invention in a slightly different manner; however, it is still respectfully submitted that the claim language is not obvious in view of the combination of Niijima and Fuller. Note that the Examiner has grouped claims 18 and 28 together in his response by indicating that

the limitations of claim 28 have been met in the claim 18 rejection; therefore, the following comments apply to both of said claims.

In particular, the Examiner asserts that Niijima teaches Applicants' feature, "wherein multiple slices are transmitted for each of at least one slice location in the user interface". Applicants respectfully disagree. As described herein with respect to claims 1 and 16, Niijima creates a virtual frame memory 49 when assembling its EPG. Each possible selection in the program guide is a 240x160 picture element in one of the 3x3 arrays, thereby creating a dedicated array of possible selections (one channel or possible program selection equals one picture element in the virtual frame memory 49). Accordingly, it is respectfully submitted that such a construction does not meet the feature of multiple slices being transmitted for each slice location in the guide region. That is, only one program is assigned to any one location of the virtual frame memory 49 of Niijima.

Accordingly, each slice location in the guide region can only show a possible program selection based on what has actually been encoded and sent for a specific channel at a specific location in the virtual frame memory 49. Although the thick line shown in FIG. 19 may move about (allegedly caused by user interaction therewith) this does not mean that multiple slices are transmitted for each location in the guide region. Accordingly, Applicants respectfully submit that Niijima and Fuller, either alone or in combination, fail to teach, suggest, or disclose Applicants' invention of Independent claims 18 or 28.

Furthermore, independent claim 30 (an apparatus claim for a terminal having a demodulator, a transport demultiplexer, and at least one video decoder) contains a similar feature to that of claims 18 and 28. Specifically, the transport stream multiplexer of the subject invention is coupled to a demodulator such that a sequence of packets for a plurality of slices for a guide region is such that multiple slices are transmitted for each of at least one slice location in the guide region. This feature has been discussed in detail above with respect to these specific alleged teachings of Niijima. Applicants respectfully submit that, for at least the reasons discussed above, Niijima fails to disclose such a feature. That is, the virtual frame memory 49 of Niijima includes only one possible slice or selection or program transmission per picture element in the

overall virtual frame memory 49. Accordingly, it is respectfully submitted that Niijima and Fuller, either alone or in combination, fail to teach or suggest Applicants' invention as claimed in independent claim 30.

As such, Applicants submit that independent claims 1, 16, 18, 28 and 30 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 2-3, 5, 8-11, 13, 25 and 31 depend, either directly or indirectly, from independent claims 1, 16, 18, 28 and 30 and recite additional limitations therefor. As such, for at least the same reasons as discussed above, Applicants submit that these dependent claims are also not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

## Claims 4 and 20

The Examiner has rejected claims 4 and 20 under 35 U.S.C. §103(a) as being unpatentable over Niijima. Applicants respectfully traverse the rejection.

Claims 4 and 20 depend, either directly or indirectly, from claims 1 and 18, respectively, and introduce additional features therefor. As such, for at least the reasons discussed above with respect to independent claims 1 and 18, the Niijima reference does not teach or suggest Applicants' invention as a whole. The Examiner's invoking of Official Notice to TDM does not bridge the gap in the prior art teachings with respect to the independent claims. The Applicants also note a defect in the rejection in that the sentence at the top of Page 8 of the Office Action is grammatically incomplete and does not offer motivation to combine.

As such, for at least the same reasons as discussed above, Applicants submit that these dependent claims are also not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

# Claims 6 and 19

The Examiner has rejected claims 6 and 19 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 6,504,576, (hereinafter "Kato"). In the Office Action, the Examiner asserts that Niijima fails to disclose the presentation at the designated time according to headers. As such, the Examiner cites Kato as allegedly disclosing the MPEG stream having packets that comprise headers, and that such headers have decoding time display time information. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify Niijima according to teachings of Kato. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claims 6 and 19 depend, either directly or indirectly, from claims 1 and 18, respectively. As described hereinabove with respect to independent claims 1 and 18, the combination of the Niijima and Fuller is an improper combination which does not result in the subject invention. The addition of Kato with respect to additional features of the identified dependent claims still does not result in the claimed invention of either claim 1 or 18, as a whole. Accordingly, Applicants respectfully submit that claims 6 and 19 are not obvious in view of the combination of Niijima, Fuller, and Kato and, as such, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claim 7

The Examiner has rejected claim 7 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 5,485,221, (hereinafter "Banker"). In the Office Action, the Examiner asserts that Niijima fails to disclose guide slices that comprise a partial set of guide slices in the region. As such, the Examiner cites Banker as allegedly disclosing that EPG data may be too much for the receiver, so only selected portions of the EPG data are going to be transmitted. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify Niijima according to teachings of Banker. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claim 7 depends, either directly or indirectly from claim 1. As described hereinabove with respect to independent claim 1, the combination of the Niijima and Fuller is an improper combination which does not

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result in the subject invention. The addition of Banker with respect to additional features of the identified dependent claim still does not result in the invention of claim 1, as a whole. Accordingly, Applicants respectfully submit that claim 7 is not obvious in view of the combination of Niijima, Fuller and Banker and, as such, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claim 12

The Examiner has rejected claim 12 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 5,946,045, (hereinafter "Ozkan"). In the Office Action, the Examiner asserts that Niijima fails to disclose that the user requests additional information for the program guide. As such, the Examiner cites Ozkan as allegedly disclosing that users can request a program guide, and that such program guide is transmitted to the user only on a selected video channel. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify Niljima according to teachings of Ozkan. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claim 12 depends indirectly from claim 1. As described hereinabove with respect to independent claim 1, the combination of the Niijima and Fuller is an improper combination which does not result in the subject invention. The addition of Ozkan with respect to additional features of the identified dependent claim still does not result in the claimed invention of claim 1, as a whole. Accordingly, Applicants respectfully submit that claim 12 is not obvious in view of the combination of Niijima, Fuller and Ozkan and, as such, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claims 14, 22, 23

The Examiner has rejected claims 14, 22, and 23 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 5,510,842, (hereinafter "Phillips"). In the Office Action, the Examiner asserts that Niijima

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fails to disclose that the user requests additional information for the program guide. As such, the Examiner cites Phillips as allegedly disclosing a header with a start and stop location. The Examiner concludes that Phillips discloses a start and stop code which meets the limitation of the header with a start and stop code and, as such, that it would have been obvious to one of ordinary skill in the art to modify Nijima according to teachings of Phillips. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claim 14, 22 and 23 depend, either directly or indirectly, from claims 1 and 18, respectively. As described hereinabove with respect to independent claims 1 and 18, the combination of the Niijima and Fuller is an improper combination which does not result in the subject invention. The addition of Phillips with respect to additional features of the identified dependent claims still does not result in the claimed invention of either claim 1 or 18, as a whole. Accordingly, Applicants respectfully submit that claims 14, 22 and 23 are not obvious in view of the combination of Niljima, Fuller and Phillips and, as such, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claims 15, 17, 29

The Examiner has rejected claims 15, 17, and 29 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 5,822,014, (hereinafter "Steyer"). In the Office Action, the Examiner asserts that Niijima fails to disclose that each slice location includes program data. As such, the Examiner cites Steyer as disclosing a program guide in a mosaic which can comprise text and images meeting the limitation of a slice location including guide data for a guide program. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify Niijima according to teachings of Steyer. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claims 15, 17, and 29 depend, either directly or indirectly, from claims 1, 16, and 28, respectively. As described hereinabove with respect to independent claims 1, 16, and 28, the combination of the Niijima and Fuller is an improper combination which does not result in the subject invention. The

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addition of Steyer with respect to additional features of the identified dependent claims still does not result in the claimed invention of any of claims 1, 16, and 28, as a whole. Accordingly, Applicants respectfully submit that claims 15, 17 and 29 are not obvious in view of the combination of Niijima, Fuller and Steyer and, as such, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claims 26-27

The Examiner has rejected claims 26-27 under 35 U.S.C. §103(a) as being unpatentable over Niijima in view of Fuller in further view of U.S. Patent No. 5,596,373, (hereinafter "White"). In the Office Action, the Examiner asserts that Niijima fails to disclose the guide slice as being combined with an additional region of the user interface. As such, the Examiner cites White as allegedly disclosing that the incoming data stream includes the broadcast program and the EPG data where the guide programs have been superimposed on the broadcast channel. The Examiner concludes that such alleged teachings meet the limitation of recombining the slices for the guide region with slices for at least one additional region in the user interface. As such, the Examiner further concludes that it would have been obvious to one of ordinary skill in the art to modify Niijima according to teachings of White. Applicants respectfully traverse the rejection.

In response, it is respectfully submitted that claims 26 and 27 depend, either directly or indirectly, from claim 18. As described hereinabove with respect to independent claim 18, the combination of the Niijima and Fuller is an improper combination which does not result in the subject invention. The addition of White with respect to additional features of the identified dependent claims still does not result in the claimed invention of claim 18, as a whole. Accordingly, it is respectfully submitted that claims 26 and 27 are not obvious in view of the combination of Niijima, Fuller and White and, as such, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

### CONCLUSION

Thus, Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Michael Bentley at (732) 383-1434 or Mr. Eamon J. Wall, Esq at (732) 383-1438 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

10/27/05

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